

Improving College Readiness through Targeted Transitional Courses and College Placement Testing for High School Seniors

*Submitted by the College Readiness Workgroup
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Project Purpose. The principal purpose of the project is to reduce significantly the proportion of incoming college students who need to take one or more remedial courses through the use of targeted transitional courses combined with college placement tests for high school seniors who are not college ready as juniors. The project provides a visionary, ambitious plan to address the requirement in Senate Bill 1 that instructs the Council on Postsecondary Education (CPE), the Kentucky Department of Education (KDE) and the Kentucky Board of Education (KBE) to develop a unified strategy to reduce 2010 college remediation rates by at least 50% by 2014.

The benefits of the project extend well beyond its principal purpose by providing the opportunity for collaboration among high school and college faculty in developing transitional courses and assessments for high school seniors and by ensuring that these courses and assessments are aligned with postsecondary expectations. It is an excellent way to get K-12 and postsecondary faculty working together to develop the aligned curriculum and assessments called for in Senate Bill 1.

Project Description. The project is designed to include all public and private Kentucky colleges and universities and all public and private high schools on a voluntary basis. It involves four principal components:

1. The Kentucky postsecondary community is to work collaboratively with the K-12 community to develop transitional courses for high school seniors in mathematics, reading and English who are not yet college ready in these subject areas. The ACT scores that students get as high school juniors in these areas will be used to determine college readiness. The transitional courses will be based on the Kentucky College Readiness Standards that are, in turn, based on the American Diploma Project benchmark standards.
2. Students who complete a transitional course in one of these subject areas will be encouraged to take a secure, online college placement test in that subject area at their high school and submit their test results to one or more of the participating postsecondary institutions of their choice. Students who pass the test will be guaranteed placement into an appropriate college-level course at one of these institutions provided they are admitted to that institution and enter the institution within a year of taking the test.
3. The transitional courses developed could be offered as web-enhanced courses at Kentucky high schools through the University of Kentucky's Web Homework System (WHS). A web-enhanced course, as opposed to an online course, is offered in the traditional fashion in a classroom with a regular teacher, but with all homework and tests done online. About 5,000 UK students currently use the WHS to take web-enhanced courses in mathematics and Spanish each semester. Textbooks developed for online

transitional courses could be printed and supplied to high school students at a nominal cost. Students who complete the homework and pass the secure online exams could be guaranteed placement into appropriate college courses. College courses for college credit, but taught by high school teachers, could also be offered to high school students at their high schools through the WHS as is done in UK's *Access to Algebra* program.

4. A common website that students, parents, teachers and school administrators could access for information about college readiness standards, placement testing and course placement policies of Kentucky colleges and universities will be constructed. The website will be based on a similar one developed in support of the California State University's Early Assessment Program (EAP) <http://www.csumathsuccess.org/>. Locating the site on the CPE's Data Portal would seem to be the logical choice.

Project Partners. The goal of the project is to include the CPE, the KDE, all interested school superintendents, principals and teachers, school cooperatives, local P-16 councils, all interested public and private Kentucky high schools and all public and private postsecondary institutions as partners on a voluntary basis.

The prototype for the project is currently in its first year and is a partnership between the Northern Kentucky Association of School Superintendents, representing 18 school districts in six counties, and Northern Kentucky University (NKU). The idea is to offer high school seniors the opportunity to take secure online college placement tests in mathematics in their high school after they have completed a transitional algebra course. If they pass, then they are guaranteed placement into an appropriate college-level mathematics course at NKU provided they are admitted and enter within a year of completing the test.

Superintendents, principals, parents and high school math teachers in the Northern Kentucky region are enthusiastic and supportive of this initiative. In fact, the superintendents initiated the project by sending a letter to NKU President Votruba requesting that NKU support it, a request that NKU enthusiastically granted. They have also asked on several occasions that reading and writing tests be developed and administered in a similar way.

Conner High School was the only high school that tested in the fall after students completed a well-designed transitional algebra course offered on block schedule. The results are impressive and indicate the extraordinary potential of the placement-testing project. There were 66 students with math ACT scores less than 19 who took the KYOTE college readiness test and 34 of the 66, or 52%, passed. Thus these 34 students would not have to take a remedial mathematics course if they entered NKU in the fall.

There are 14 high schools in Northern Kentucky planning to give the placement tests this spring, but this number is expected to increase next year along with a significant increase in the number of students.

Elizabethtown Community and Technical College (ECTC) is working with 17 public school districts in 12 counties and several private high schools in its region to develop a similar program for the 2009-2010 school year.

Project Background. The project builds upon statewide agreement on standards of college readiness in mathematics and English among all of Kentucky's public postsecondary institutions, upon the ACT test given to all Kentucky public high school juniors, upon the efforts of the Kentucky postsecondary mathematics community over many years through what is now called the Kentucky Online Testing (KYOTE) project, upon the technological support given to KYOTE by the University of Kentucky, and upon the Northern Kentucky placement-testing project in mathematics that is an outgrowth of the KYOTE project.

The KYOTE project began in the spring of 2006. The KYOTE group consists of about 70 people, including math faculty from all eight state universities, 12 of the 16 community and technical colleges, several private colleges, and representatives from the CPE and adult education. The KYOTE group looked at institutional math placement tests from all around the state and discovered that they were all remarkably similar. The KYOTE college readiness placement test, the college algebra placement test, and the calculus placement test that were developed are based on the Kentucky College Readiness Standards in mathematics, and on the key concepts and questions used in virtually all the institutional tests. Consensus was easy to reach.

The KYOTE group decided that its tests should be offered in a secure, proctored setting to ensure accurate placement. The University of Kentucky (UK) built a sophisticated and user-friendly system to support the testing. Eastern Kentucky University (EKU), NKU and ECTC have been using the tests since they became available in the spring of 2007. Many other institutions use them on a less regular basis. The KCTCS has agreed to let its institutions use them as an alternative to COMPASS.

The website www.mathclass.org that supports the KYOTE testing has been developed over more than a decade by the mathematical sciences computing group at UK led by Paul Eakin and Ken Kubota. In addition to KYOTE, the site supports the Kentucky Early Mathematics Testing Program (KEMTP) and the Web Homework System through which online and web-enhanced courses can be offered. *All products and expertise, including the KYOTE system, are offered free of charge to any educational institution.*

The KYOTE site is not limited to mathematics tests alone. A reading test is currently available and has been piloted by EKU. The mechanics of giving a writing test to be read by multiple readers have been developed and tested.

Project Team. The goal of the project is to form groups of college faculty in mathematics and English to work with high school teachers in their regions to develop and discuss transitional courses and assessments in particular and curriculum alignment issues in general. This concept could be extended to other disciplines as well.

Sue Cain (EKU/CPE), Paul Eakin (UK), Ted Hodgson (NKU), Ken Kubota (UK), Linda Mayhew (ECTC), and Steve Newman (NKU) will be the leadership team involved in the initial development of the project.

Project Evaluation. The project will employ the state's P-20 data system to compare the performance of students on the college placement tests and in the transition courses to their subsequent performance in college courses in the same subject area. The longitudinal data obtained would then be used to modify and improve the placement tests and the transitional courses on a regular basis.

Project Budget and Amount of Economic Stimulus Funds Requested.

- Professional Development for K-12 Teachers: \$1,000,000
- Support for Project Team Leaders in each Region: \$250,000
- Course Development Funds (includes writing textbooks, course materials, homework problems, and assessments): \$250,000
- Web-enhancement of Courses Developed (putting course homework problems and exams online): \$500,000
- Project Evaluation Funds: \$200,000
- Computer Enhancement Funds (for adding features to the existing system required to support statewide project): \$500,000
- Construction of College Readiness Website (like EAP site): \$500,000

Total Estimated Cost: \$3,200,000

Conclusion. The California State University's Early Assessment Program (EAP) is hailed nationwide as a model of K-12-postsecondary collaboration. It offers guaranteed placement for high school juniors who pass college placement tests administered on a voluntary basis and maintain their grades as seniors. The state system experienced about a 20% drop in its remediation rate a year after this plan went into effect and that gain has been maintained.

The Kentucky plan being proposed, in conjunction with the administration of the EXPLORE, PLAN and ACT, would give Kentucky the most impressive and effective college readiness program in the nation. The EAP provides a college placement test for high school juniors. The ACT plays that role in Kentucky. But the Kentucky plan also provides an important second chance for high school seniors who are not yet college ready as juniors to take a transitional course and a college placement test to become college ready. It brings together high school and college faculty to work collaboratively on transitional courses and curriculum alignment. It brings together a very diverse postsecondary system to collaborate with the K-12 system to improve college readiness.

The plan would make Kentucky the national leader in efforts to improve college readiness that other states would emulate.